

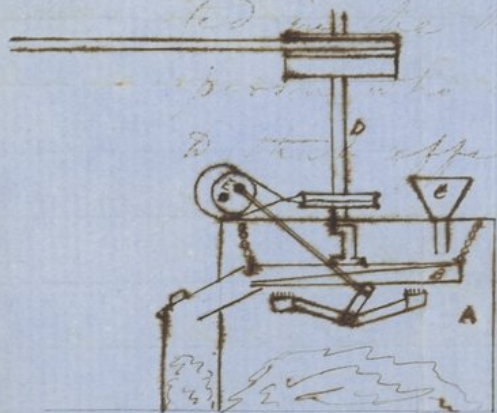
given to the sieve by the shaft of which a short end  
is attached at the lower part. Under the sieve there  
is a shaft to which is attached the office  
are brushes which are caused to rotate against the bottom  
of the sieve by means of the rotation communicated to  
the eccentric wheel mounted on the shaft.

U.S. Assay Office  
New York March 7 1855

My dear Sir

Having recently erected a machine  
for sifting sweeps in this office, which has effect-  
ually removed the unpleasant annoyances of the  
old method, I have thought that a description of  
it would be interesting and perhaps of advantage  
to you.

We were formerly very much annoyed  
by the dust arising from the sifting by hand, and  
I have no doubt but that the death of Mr Kane  
was produced by this cause. To prevent this annoy-  
ance, and danger to the workmen, I thought of  
several plans for sifting in close vessels, but before  
putting any of these into execution, I visited an  
extensive Drug Mills in this vicinity, where I found  
a machine, which, some slight improvements was  
adopted as being better than any other plan.



A is a close box about 5 feet long, 5 feet  
high, and 3 feet wide, with a door at the  
bottom. B is a square sieve suspended on 4  
chains, and which is supplied through the  
hopper C. This hopper has the usual attach-  
ments for feeding the sieve which are  
not shown in the sketch. Motion is



given to the sieve by the shaft  $\alpha$  to which a short crank is attached at the lower part. Under the sieve, there is a shaft  $\beta$  which is attached <sup>and</sup> two arms on the <sup>end</sup> of which are brushes which are caused to vibrate against the bottom of the sieve by means of the motion communicated by the eccentric wheel marked  $E$ .

Only one sieve is used, and this is made of brass wire 60 meshes to the inch. The powder which passes through this, collects on the bottom of the box and is taken out from time to time to be washed. The coarse grains pass into a smaller box on the outside, and are taken out from time to time and sifted by hand through a coarse sieve to remove the flattened grains of metal, and the portion which passes through the hand sieve is again ground, and again put into the hopper of the machine. The apparatus being perfectly tight, no dust escapes, and the labor is very much reduced. It is very simple, not likely to get out of order, and the workmen are very much pleased with it.

The whole apparatus including belts, and putting up, cost about \$100. If you would like to have one erected in the Mint, I have no doubt but that the same person who made this, would be glad to receive an order to that effect.

Yours very truly  
Edward M. Reub

1853  
March 7<sup>th</sup>  
Edw. N. Kent  
N. York

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